

WHAT IS CLAIMED IS

- Sub A1 >
- 5
1. A method for modulating endoreduplication comprising introducing into a target cell an isolated viral replicase polynucleotide operably linked to a promoter driving expression in the target cell or an isolated viral replicase polypeptide.
 2. The method of claim 1 wherein the polynucleotide is from a plant geminivirus.
 3. The method of claim 2 wherein the polynucleotide is wheat dwarf virus Replicase.
 4. The method of claim 1 wherein the target cell is a plant cell.
 5. The method of claim 4 wherein the plant cell is from a monocot or a dicot plant.
 - 3 6. The method of claim ² wherein the plant cell is from corn, soybean, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, potato, tomato, and millet.
 7. A method for increasing crop yield through increased endoreduplication comprising introducing into a plant cell an isolated viral replicase polynucleotide operably linked to a promoter driving expression in the plant cell.
 8. The method of claim 7 wherein the polynucleotide is from a plant geminivirus.
 9. The method of claim 8 wherein the polynucleotide is wheat dwarf virus Replicase.
 10. The method of claim 7 wherein the plant cell is a monocot or a dicot.
- Sub A2 >
- 10
- Sub A3 >
- 15
- Sub A4 >
- 20
- Sub A5 >
- 25
- Sub A6 >
- 30
- Sub A7 >
- 35
- Sub A8 >
- 40
- Sub A9 >
- 45
- Sub A10 >
- 50
- Sub A11 >
- 55
- Sub A12 >
- 60
- Sub A13 >
- 65
- Sub A14 >
- 70
- Sub A15 >
- 75
- Sub A16 >
- 80
- Sub A17 >
- 85
- Sub A18 >
- 90
- Sub A19 >
- 95
- Sub A20 >
- 100

11. The method of claim ⁵~~10~~ wherein the plant cell is from corn, soybean, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, potato, tomato, and millet.

5

12. The method of claim 7 wherein the promoter is inducible, or regulated in a tissue specific manner, or developmentally or temporally regulated.